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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,656	08/16/2001	Zhisheng Niu	099000-55448 (FUJB 18.868	2843
26304	7590	03/30/2005	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			SAM, PHIRIN	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

6

<b>Office Action Summary</b>	<b>Application No.</b> 09/931,656	<b>Applicant(s)</b> NIU, ZHISHENG	
	<b>Examiner</b> Phirin Sam	<b>Art Unit</b> 2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**Attachment(s)**

- |   |  |   |
|---|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | <b>PHIRIN SAM</b><br><b>PRIMARY EXAMINER</b> | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  |  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/20/02</u> . |  | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

(a) **Regarding drawings**, the drawings are objected to under 37 CFR 1.83(a) because they fail to provide the labels for each block of figure 1 as described in the specification. For example, blocks 20 should be also labeled as TCP source or block 40 should be also labeled as mobile terminal, etc. Therefore, any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

(b) Claims 1-15 are objected to because of the following informalities:

**Regarding claim 1**, line 3, “A. When the access point” should be rewritten as ---(a) when an access point---. Lines 4-5, “with time-stamp of first local sequence number. The packet” should be rewritten as ---with a time-stamp of a first local sequence number, the packet---. Line 6, “the current terminal” should be rewritten as ---a current terminal---. Line 7, “B. When the current terminal” should be rewritten as ---(b) when the current terminal---. Lines 8-9, “an acknowledgement (AN). It is” should be rewritten as ---an acknowledgement (AN), it is---. Line 9, “with time-stamp of second local sequence” should be rewritten as ---with a time-stamp of a second local sequence---. Line 12, “C. At the access point” should be rewritten as ---(c) at the access point---. Line 13, “packet loss is made. This is according” should be rewritten as ---packet loss is made, this is according---. Line 16, “point. If a lost data packet” should be rewritten as ---point, if the lost data packet---. And line 17, “retransmits. When congestion loss” should be rewritten as ---retransmits, when congestion loss---.

**Regarding claim 2**, line 1, “mentions a TCP local retransmission scheme” should be rewritten as ---mentions the TCP local retransmission scheme---. Line 2, “as follows. In step A” should be rewritten as ---as follow: in step A---. Line 3, “a LAC-PDU head with time-stamp of first local sequence” should be rewritten as ---the LAC-PDU head with the time-stamp of the first local sequence---.

**Regarding claim 3**, line 1, “a TCP local retransmission” should be rewritten as ---the TCP local retransmission---. Lines 2-3, “as follows. Then time-stamp of first local sequence” should be rewritten as ---as follows: the time-stamp of the first local sequence---. Line 3, “field. Along” should be rewritten as ---field, along---.

**Regarding claim 4**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. During” should be rewritten as ---follows: during---. Line 3, “from access point to terminal, the real delivery sequence” should be rewritten as ---from the access point to the terminal, a real delivery sequence---. Line 4, “the time-stamp value of first local sequence number in TCP data packet” should be rewritten as ---a time-stamp value of the first local sequence number in the TCP data packet---.

**Regarding claim 5**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. The time-stamp of second sequence number” should be rewritten as ---follows: the time-stamp of the second sequence number---. Lines 3-4, “a fix length bit field. It records the maximum value of time-stamp of first local sequence number” should be rewritten as --- a fix length bit field, it records a maximum value of the time-stamp of the first local sequence number---.

**Regarding claim 6**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. As mention” should be rewritten as ---follows: as mention---. Line 3, “a lost data packet” should be rewritten as ---the lost data packet---. Line 4, “of second local sequence” should be rewritten as ---of the second local sequence---. Line 1, “from received” and “of first local” should be rewritten as ---from the received--- and ---of the first local---. Line 2, “point. Further more” should be rewritten as ---point, further more---. Line 8, “acknowledgement packet” should be rewritten as ---the acknowledgement packet---. Line 9, “made. The comparison” should be rewritten as ---made, the comparison---. Line 10, “of second local sequence” should be rewritten as ---of the second local sequence---. Line 11, “packet. If the time-stamp of first local” should be rewritten as ---packet, if the time-stamp of the first local---. Line

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12, “of second local sequence” should be rewritten as ---of the second local sequence---. Line 13, “of first local sequence” should be rewritten as ---of the first local sequence---. Line 14, “retransmitted. In addition” should be rewritten as ---retransmitted, in addition---. Line 15, “which time-stamp of first local sequence” should be rewritten as ---which the time-stamp of the first local sequence---.

**Regarding claim 7**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Lines 2-3, “follows. The update of the time-stamp of first local” should be rewritten as ---follows: the update of the time-stamp of the first local---. Line 4, “the time-stamp of first local sequence” should be rewritten as ---the time-stamp of the first local sequence---.

**Regarding claim 8**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. As mentioned” should be rewritten as ---follows: as mentioned---. Line 4, “situations. They” should be rewritten as ---situation, they---. Line 7, “the time-stamp of first local sequence” should be rewritten as ---the time-stamp of the first local sequence---. Line 8, “of second local” should be rewritten as ---of the second local---.

**Regarding claim 9**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. The explicit” should be rewritten as ---follows: the explicit---. Line 5, “of acknowledgement” should be rewritten as ---of the acknowledgement---. Line 6, “to TCP source, is set. When TCP source receives an” should be rewritten as ---to the TCP source, is set, when the TCP source receives the---.

**Regarding claim 10**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. The mentioned above time” should be rewritten as ---follows: the mentioned

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above a time---. Line 3, “for first local sequence number or second local” should be rewritten as ---for the first local sequence number or the second local---.

**Regarding claim 11**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. The mentioned above time” should be rewritten as ---follows: the mentioned above a time---. Line 3, “for first local sequence of second local” should be rewritten as ---for the first local sequence or the second local---.

**Regarding claim 12**, line 1, “a TCP local” should be rewritten as ---the TCP local---. Line 2, “follows. In mentioned step A” should be rewritten as ---follows: in mention step A---. Line 3, “the time-stamp of first local sequence” should be rewritten as ---the time-stamp of the first local sequence---. Line 4, “lower layer” should be rewritten as ---a lower layer---. Line 5, “of TCP data packet” should be rewritten as ---of the TCP data packet---. Line 6, “created. With” and “of second local” should be rewritten as ---created, with--- and ---of the second local---. Line 7, “received maximum transfer sequence number of” should be rewritten as ---received a maximum transfer sequence number of the---.

**Regarding claim 13**, line 2, “follows: Method” should be rewritten as ---follows: method---. Line 3, “including sequence number” should be rewritten as --- including a sequence number---. Line 4, “to mobile terminal” should be rewritten as ---to a mobile terminal---. Line 7, “of first local” should be rewritten as ---of a first local---. Line 10, “of first local sequence” should be rewritten as ---of the first local sequence---. Line 15, “of second local” should be rewritten as ---of the second local---. Line 16, “of first local sequence” should be rewritten as --- of the first local sequence---. Line 18, “of first sequence” should be rewritten as --- of the first sequence---.

**Regarding claim 14**, line 1, “a TCP local” should be rewritten as ---the TCP local---.

Line 2, “follows: Method” should be rewritten as ---follows: method---. Line 3, “transmitting a data packet” should be rewritten ---transmitting the data packet---. Line 4, “of first local” should be rewritten as ---of the first local---. Line 6, “of first local” should be rewritten as ---of the first local---.

**Regarding claim 15**, Line 2, “follows: Method” should be rewritten as ---follows: method---. Line 3, “receives data packet including sequence number” should be rewritten as ---receives the data packet including a sequence number---. Line 7, “of first local” should be rewritten as ---of a first local---. Line 9, “of second local” should be rewritten as ---of a second local---. Line 10, “of first local” should be rewritten as ---of the first local---. Line “a acknowledgement data” should be rewritten as ---an acknowledgement data---. Line 12, “of second local” should be rewritten as ---of the second local---. Line 13, “of first local” should be rewritten as ---of the first local---.

### ***Conclusion***

2. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on Mon-Fri, 8:00AM - 4:30PM.

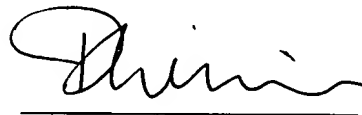


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on (571) 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

Date: March 23, 2005

A handwritten signature in black ink, appearing to read 'Phirin', written over a horizontal line.

**PHIRIN SAM  
PRIMARY EXAMINER**